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ABSTRACT

Focusing primarily on program modification and termination, this document is one of two handbooks developed by a California consortium of vocational educators to provide guidelines for developing and evaluating occupational programs. (The accompanying handbook, CE 017 928, focuses on program initiation.) A flow chart illustrating the different stages of program modification and termination precedes an introduction explaining the development and use of this manual. Guidelines and procedures are then presented for the six major stages identified in the flow chart. These stages are as follow: operate program (initiate evaluation plan); analyze internal and external factors to determine whether or not the program is meeting original goals and/or objectives; identify options for modification and analyze consequences of each option; recommend program modifications; obtain approvals for changes; and initiate program changes. Appended are two presentations on occupational program evaluation which were given at the workshops in which this manual was developed. (BM)

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ED159448

CALIFORNIA

GUIDELINES FOR

MODIFYING AND TERMINATING OCCUPATIONAL PROGRAMS

EVALUATION HANDBOOK

PRODUCED UNDER PROVISION OF

P.L. 90-35, EPDA, PART F

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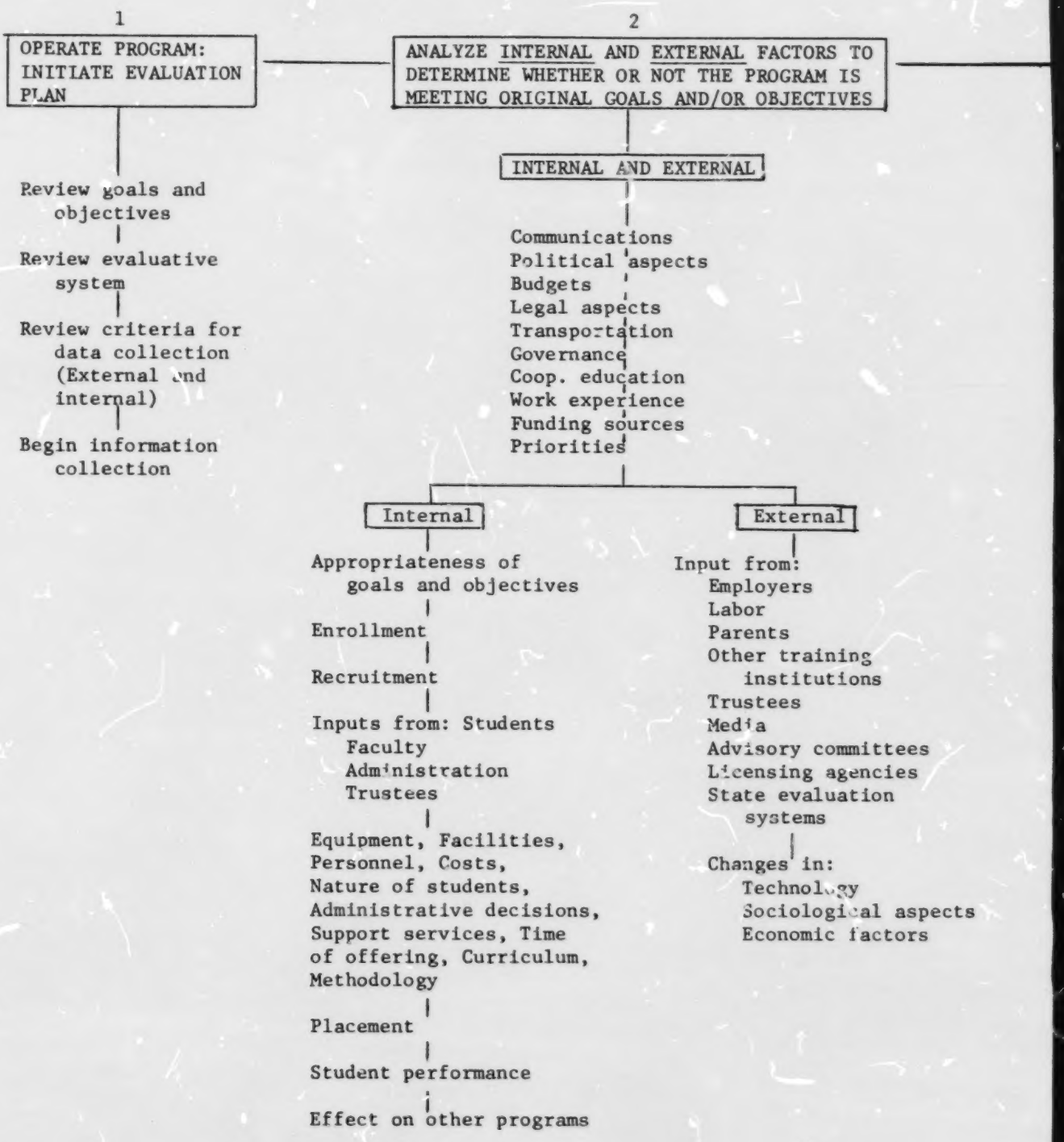

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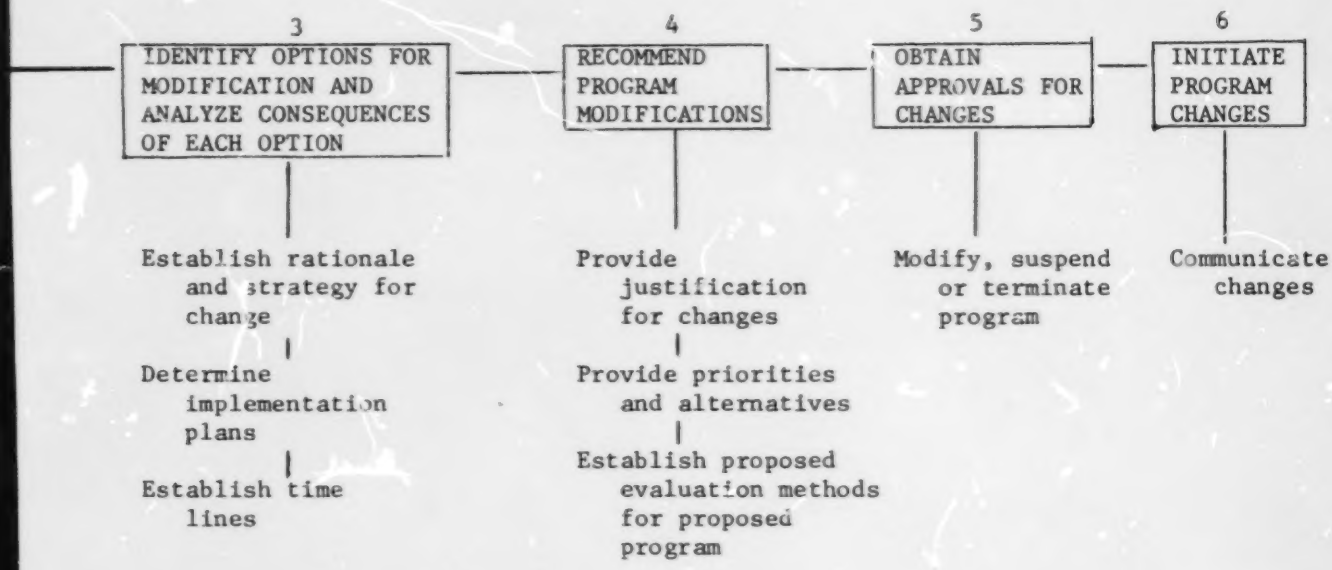

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INTRODUCTION

Distribution

This handbook is being sent to secondary schools, ROC/ROP directors and occupational administrators throughout the state of California.

This manual was written as the result of a series of meetings held in nine California cities during the spring of 1978. Invitations to participate were sent to all secondary school occupational administrators by the State Department of Education and the Chancellor's Office of the State Community Colleges.

The primary thrusts of the meetings (further described in the section following entitled "Brief History") were to review an occupational program planning manual written last year, Guidelines for Occupational Program Planning, and to improve on the latter sections of that handbook -- particularly as they related to occupational program evaluation.

Additional copies of this manual may be obtained from Dr. William Morris, California Community Colleges, 1238 "S" Street, Sacramento, Calif. 95814 or from Mr. William J. Callahan, State Dept. of Education, 721 Capitol Mall, Sacramento, Calif. 95814.

Brief History

This handbook was written after a series of regional workshops were conducted throughout the state of California as the result of a project funded under provisions of the Educational Professions Development Act, Part F, (P.L. 90-35). The office for New Dimensions of the Los Angeles Community College District served as the fiscal agent for the project.

This project was a "continuation" of a vocational educational program which had produced, the previous year, a manual entitled Guideline for Establishing, Modifying and Terminating Occupational Programs. The primary purpose of the E.P.D.A. grant was to provide a series of in-service training workshops to better acquaint occupational administrators throughout the state with the original "Guidelines" manual and to improve that handbook.

Many of the members of the statewide consortium who had been involved in the 1976-77 project volunteered to serve again; this consortium met three times during the grant period to direct the progress of the program. The consortium members are listed on page 1.

It became apparent during the first meeting of the consortium and the early meetings of the workshops that attending members were acquainted with, and generally satisfied, with the materials covering the initiation of occupational programs but were desireous of improving those areas identified as modifying and terminating occupational programs. Secondly, it was noted at both the consortium meetings and at the workshops that evaluation was the key to program modification and that the major time and effort in the workshops should be directed toward improving program evaluation.

The consortium provided the format for the workshops; the consortium identified the projected areas for the workshops (Los Angeles, Riverside, San Diego, Anaheim, Santa Barbara, Fresno, San Jose, Hayward, Sacramento and Redding); the consortium also provided the format for the workshops which were to have: an overview film; a presentation by a consultant on evaluation; a review of the original handbook; a presentation of a work-

ing model of a program modification chart for the workshops to develop. The consortium also developed a final revision of the chart after the workshops were concluded which is included in the front of this workbook.

Ten workshops were planned but only nine were held (the scheduled meeting in Los Angeles was literally rained out). The meetings ran approximately four hours and included a slide presentation, an expert's presentation on program evaluation and several hours of workshop members' time in developing the program modification chart.

Three of the workshop evaluation experts were from SRI International in Menlo Park; Ms. Shirley McGillicuddy provided the first presentation, Dr. Philip Sorensen directed the others with assistance in several meetings from Dr. George Ebey. Mr. C. Allen Paul, dean of technical-vocational education at Grossmont College, presented the evaluation materials at the San Diego meeting. Mr. Robert Sayette, previously dean of occupational education at East Los Angeles College, and Mrs. Hope Holcomb, previously the assistant to the Chancellor in the Los Angeles Community College District, directed the workshop meetings with Mr. Robert Holcomb.

Use of Chart

The basic "working" document of this handbook is the chart included at the beginning of this manual. As used in last year's Guidelines handbook, the chart is to be used primarily as a check list for occupational administrators. Some items will loom very significantly for some programs but may not be particularly important for others. No effort has been made to prioritize those items listed below each box -- again such prioritization will vary considerably from program to program and from district to district.

If the chart is used in conjunction with the Guidelines handbook of last year, workshop members suggested that item one on the new chart, "Operate Program" should be super-imposed upon the previous book's chart, items 9 and 10.

Bibliography

The primary emphasis of this handbook is upon program evaluation -- particularly as it relates to modification and termination. As stated in the prior year's handbook, very little information has been written on program modification and termination by California school districts. Thus the bibliography included in this manual identifies primarily materials related to evaluation. Some aspects of program modification were incorporated in the "original" Guidelines (1977).

Addendum

Included in the latter section of this handbook are materials provided by Dr. Sorensen, C. Allen Paul, Mr. Robert Sayette and Sacramento City College. Some of Dr. Sorensen's material was presented at the workshops; some was provided to the project director after the workshops were completed. Mr. Paul's material is briefed from his San Diego presentation and Mr. Sayette's material on advisory committees was presented at most workshops. The associate Dean of Occupational Education at Sacramento College provided data on that college's method of working with advisory committees.

1

OPERATE PROGRAM: INITIATE EVALUATION PLAN

As indicated in the introduction, this handbook assumes that an occupational program has been conceived and approved; it is now to be implemented.

Review Goals and Objectives

As identified in the 1977 Guidelines, a comprehensive set of goals and objectives should be determined as each new program is formulated. Workshop attendees stressed that prior to program initiation, a careful review of these original goals and objectives should be made and should be kept in mind throughout the implementation and evaluation period.

Review Evaluative System

Similarly, workshop participants stressed the importance of reviewing, prior to program implementation, the evaluation system established when the program was being formulated.

Review Criteria for Data Collection and Begin Information Collection

At this point, the administrator should have a good concept of what information he is going to need for measuring whether the program's goals and objectives are being achieved. He should have a specific plan for gathering the information; he should know: Why he needs the data, what he needs, how he is to collect them, when he is going to obtain them and how he plans to evaluate them.

2

ANALYZE INTERNAL AND EXTERNAL FACTORS TO DETERMINE WHETHER OR NOT THE PROGRAM IS MEETING ORIGINAL GOALS AND/OR OBJECTIVES

Internal and External

As these terms are used in this handbook, the internal aspects relate to those within the institution; others are external. A great number of the items considered in program evaluation are shared ones between the institution and the community or are items which should be considered as evaluative factors both within the institution and outside of it; such items are classified in the chart as "internal and external".

Communications

An aspect often overlooked in program evaluation, communication between institution and community as well as the communication within the institution often need careful evaluation. How effectively are programs advertized to students, faculty, employers and community? Is there some method of ascertaining whether the media form being used is successful? Are there sufficient provisions made for feedback from all individuals concerned? Is there a system for analyzing the information gathered on communication?

Political Aspects

Every workshop gave attention to this ever-present feature of program building. Administrators more and more appreciate that a program to be successful must have the support of students, employers, instructors, community and boards of education. In addition, approval is often needed from area, state and the federal government. Utilizing sophisticated communication procedures, the prudent administrator keeps

constituents aware of the program's progress and, in turn, keeps informed as to the reactions of the various political forces to the program. The use of advisory committees, surveys, follow-up studies, and broad-based constituents involvement in the program have proven effective techniques in providing the information needed by the administrator who is sensitive to the political scene.

Budgets

Workshop attendees reported that this item was often the most crucial item in program control. The able administrator must be aware of "external" budgetary changes which may effect his program -- whether these are local, state or federal. But closer to the scene are budgetary changes within the institution and his own need to "control" the various costs items incorporated within the program's budget. It was emphasized that in his original evaluation scheme, the administrator must establish a systematic method of mainteaining an up-to-date budgetary picture of program and provide for constant evaluation of the various budgetary items.

Legal Aspects

Although closely identified with political aspects, many of the occupational administrators at the workshops felt that this item deserved separate treatment. Here the emphasis is upon the need for the program director to be aware of current and pending legislation as it relates to the program. Often quoted as examples of the changing scene in this regard were the recent federal laws regarding the handicapped, sex bias and ethnic factors as they relate to both student registration and staff hiring practices. Other examples of legal factors necessitating evaluation analysis include VEA regulations, environmental control factors,

safety and health legislation as they affect occupational programs.

Transportation

Although not as significant an item as legal aspects in many institutions, many problems relating to student transportation were identified at the workshops. The decision as to where to hold certain occupational classes is often determined by the accessibility and cost of transportation. Problems of class scheduling and the growing demand for busses for other purposes have made many administrators more conscious of transportation problems when evaluating their programs.

Governance

The growing centralization of control -- whether within the local district, by state or federal action -- was often a subject of concern at the workshops. As with legal and political aspects, the program administrator must be conversant with the changing nature of governance if he is to be fully aware of the many factors which may affect his program. Again, the importance of keeping local and state personnel informed as to a program's status was stressed at several of the workshops.

Cooperative Education and Work Experience

Not all institutions are involved in these programs, but those administrators representing schools that had such, felt that these items were significant enough to warrant establishing evaluation check points. The importance of providing proper administration, good teachers and proper control of these programs was stressed by the administrators at the workshops. Examples were cited of cooperative education programs which had been well administered at the institutions and which had good employer supervision that had continued to flourish when

programs lacking these elements had not been successful.

Funding Sources

Although this item was mentioned when reviewing budget evaluations, workshop members felt that occupational administrators should provide for an on-going evaluation of the funding sources involved in any new program. A shift of policies on the part of VEA, the state department, private sources and/or the district can have a profound effect upon the institution's programs. The need to maintain an awareness of policy shifts by keeping abreast of national, state and local trends via periodicals, bulletins and professional associattion meetings was emphasized by workshop members.

Priorities

At several meetings the concept of prioritizing was stressed. Administrators recognize that obtaining funds for new programs is becoming more difficult and they have to weigh the various programs against each other to ascertain which is the better. In a like manner, an administrator cannot evaluate every aspect of every program and must identify those items for evaluation which appear to be most significant. Local districts and institutions often are forced to make similar prioritization decisions as they review budgets, legal and political aspects of various programs. Establishing early evaluation procedures for such prioritization can help reduce the trauma which often accompanies making decisions in crisis situations.

INTERNAL

Appropriateness of Goals and Objectives

As administrators begin to evaluate programs, one area too often neglected, according to workshop participants, is that of questioning the original goals and objectives. Since goals are normally determined prior to gaining the knowledge that comes with the experience of running a program, the participants at the workshops stressed the need for recognizing that these goals themselves may need to be revised and that careful program monitoring and analysis may illustrate the need for such changes.

Enrollment and Recruitment

Another key factor in program evaluation is that of enrollment analysis. Workshop participants identified the following areas needing evaluation when the administer is reviewing program enrollment: the nature of students, legal requirements, numbers of students enrolling, attrition rates, causes of attrition, declining enrollment, effect of supportive services upon enrollment, nature of recruitment and retention programs. Workshop attendees often stressed the need for utilizing student surveys to identify reasons for program retention, attrition, and recruitment strengths or weaknesses.

Input

As mentioned above, workshop participants stressed utilization of a wide variety of institutional sources when evaluating programs. The use of faculty and student evaluation forms was identified by many as an effective method of obtaining feedback. Administrators,

too, have to be alert to information regarding the program received from staff members, "higher" administrators and from board members.

Additional Evaluation Areas

Without going into a great amount of detail, the workshops identified the following areas as additional ones that the occupational administrator must review as he is evaluating programs:

Equipment and Facilities - Cost, adequacy, obsolescence, maintenance, replacement

Personnel - Competency, tenure factors, costs, strengths and weakness, part time or full time

Costs - Cost effectiveness, cost benefit, current and projected

Nature of Students - Are evaluation procedures established to evaluate students' attitudes, skills, sex, ages, ethnic composition? How does one change program to meet changing nature and needs of students?

Administrative Decisions - How is program affected by administrative pressures? Decisions?

Support Services - Evaluation should be made of the effect of support services (counseling, student activities, financial aids, guidance, placement, work study, etc.) on program.

Time of Offering - Could program being offered at better time of day? Should consideration be given to evening or week-end offering?

Curriculum - When reviewing curriculum, the following questions should be raised: Are courses sequential? Does curriculum really fit student needs? How does this program dove-tail with other institutional programs?

Methodology- Are the teaching methods being utilized meeting student needs? What improvements can be instituted? Are facilities, equipment and personnel satisfactory?

Placement - Evaluation of placement should include establishing a system to determine: How are students being placed? Can institution do more to ensure placement?

Student Performance - Are there methods of measuring how students are learning: Skills, knowledge, attitudes? Apart from job readiness, how have students gained from program?

Effect on Other Programs - How has this program affected other aspects of the institution - student draw, personnel, other programs?

EXTERNAL

Input from

At the workshops, the participants stressed the importance of maintaining communication with many external sources as a means of evaluating programs. Those identified to obtain reactions from included the following:

Employers - The use of surveys and personal contacts with employers were suggested as way of keeping abreast of employer needs and evaluating employer reaction to programs.

Labor - Although only a limited number of workshop members said that their schools had close relationship with labor organization, they suggested that more communication with labor groups might assist in improving program evaluations.

Parents - Here again, attendees stated that only limited contact was made with parents, several stated that this was a potential area for program assistance and evaluation.

Other Training Institutions - With the growing public demand to reduce unnecessary duplication in education, educators have given greater attention through regional councils and through informal discussions to the activities, desires and evaluation of other institutions. Experience of other schools in similar programs has proven beneficial to those institutions launching new programs and in evaluating their own. Regional consciousness has grown, public institutions have become more aware of "non-school" training institutions such as community based organizations (private and public agencies) and the re-

cognition that these institutions too can assist when one is measuring the strengths and weaknesses of programs.

Trustees and Board of Education members vary considerably in their participation in program management, but many workshop administraters emphasized the importance of both providing information to, and being aware of the reactions of, these policy making individuals. It was pointed out that when advance information is provided to board members, they are more likely to be more objective in their evaluation of new programs.

Media - Apart from utilizing the media for advertizing programs, occupational administrators can gain valuable information regarding community evaluations of programs when these are reviewed by the media.

Advisory Committees - Workshop attendees stated that other than the institution's own evaluations, the community advisory committees often serve as the best evaluative tools. A two-page review of advisory committee use and functions is included in this workbook's appendix.

Licensing Agencies - Although serving only a limited number of occupations, the reports of licensing agencies can serve as a valuable source of program evaluation.

State Evaluation Systems - Although scheduled to go through some revisions in the near future, the various state-wide systems, COPES, DROVE, SAM, TRACE have in the past years served as significant evaluation systems. With heavy emphasis upon institutional self-analysis, these systems

usually provide for a broad review of institutional programs, but have also operated to isolate and look in depth at a single one (e.g. police science).

Changes - Because of the numerous changes that can affect an institution's program which are external to institution's control, the wise administrator tries to keep abreast of these changes and utilizes information gathered when evaluating his programs; these changes include the following:

Technology - Because of the rapid technological changes in today's world, it is incumbent upon the administrator of occupational programs to keep aware of the impact of such changes upon his programs. As he evaluates a program, he must consider how technological changes may affect the teaching methodology, the physical plant, the students and teachers, and what the possible effect may be upon enrollment and placement.

Sociological Aspects - With the continuing population shifts being so much a part of the California scene, it is imperative that the state's educators be aware of the demographic changes in their areas and how these may impact upon his programs. How will a reduced population at a "lower" school change his programs? Will a major ethnic shift alter the methods of teaching? How will the emphasis upon providing equality of training in almost all occupations for women, handicapped and older citizens affect his progrm and his evaluation of it? How will these sociological factors alter his hiring practices? Counseling? Placement?

Economic Factors - Economic changes are as significant to the educator as the sociological ones. A sudden shift in job opportunities can change a marginal program into a dynamic one or, conversely, destroy it. In evaluating any program, the educator has to recognize both the long and short term economic shifts; a prime example of the effects of such shifts upon programs is exemplified in the engineering-allied areas which have waxed and waned in conformity with the ever shifting economy.

Some workshop attendees remarked that these shifts could lead to quicksand for good programs in period of economic stress if placement became the only key to determine whether a program was retained or dropped.

Another economic factor to evaluate is the nature of changing competition to the program from other institutions, organizations or agencies.

3

IDENTIFYING OPTIONS FOR MODIFICATION AND ANALYZE CONSEQUENCES OF EACH OPTION

Establish Rationale and Strategy for Change

Having evaluated a program, the administrator has to determine whether to maintain it (status quo), to suspend it (keep it on the books for future use) to modify it, or in extreme cases, to terminate it. The administrator who wishes to modify a program now has to utilize his evaluation information as the basis for establishing a rationale for change. What specific areas appear to be needing modification? What are the possible changes that could be made? What are the various ways of making these changes?

Determine Implementation Plans

The administrator, having decided what areas need changing and having established various alternative methods of operating the program, must now establish a plan for change. Are such changes feasible? Suitable? Acceptable? Some road blocks appear immediately if personnel changes seem imperative -- can one move to transfer a permanent, tenured instructor who has strong ties with one of the teacher organizations? Are costs prohibitive when newer equipment is needed? Can bilingual teachers be hired when the ethnic make-up of the students make it appear that this would be wise?

Establish Time Lines

Along with the determining how to plan to implement change, the administer must decide what schedule to follow in relation to "selling the changes" and in implementing it after obtaining approval.

4

RECOMMEND PROGRAM MODIFICATIONS

Provide Justification for Change

Assuming that these changes must be approved by another administrator, the program administrator must provide his reasons for making them. What have been the results of evaluation analysis? What will result from these changes suggested? What are the effects upon personnel, students, facilities, cost, equipment? Are there income factors to consider? Legal or political consequences?

Provide Priorities and Alternatives

The administer should ascertain which changes are most significant and when each should be implemented. According to the situation, often alternate change strategies should be provided when costs, personnel or other significant change factors must be considered. Many of the considerations incorporated in the original Guidelines Handbook in program initiation should be reviewed if major changes are envisaged.

Establish Proposed Evaluation Methods for Proposed Program

Included in recommended program modifications should be newly determined evaluation plans. If extensive changes are proposed, consideration should also be given to reviewing and/or revising the original goals and objectives.

Modify, Suspend or Terminate Program

As directed by the board, president or principal, the occupational administrator should receive approval for changes and then implement them. Suspended programs are usually those kept "on ice" for a year or two when more favorable conditions may provide an opportunity to reinstate them.

Communicate Changes

A final area of workshop discussions centered on the need for administrators to fully inform students, staff and community of program changes. There was general agreement that efforts to communicate more extensively would result in more effective programs.

Although the above paragraph completes the coverage of the chart development provided by the administators at the state-wide workshops, the following materials describe in greater detail the contibutions of the consultants who assisted with the project. This appendix includes an evaluation study by Dr. Philip H. Sorensen, an outline of Mr. Allen Paul's San Diego workshop presentation, an overview of advisory committee functions as provided by Mr. Robert Sayette and a bibliography of materials primarily related to program evaluation.

EVALUATION OF OCCUPATIONAL PROGRAMS

Dr. Philip H. Sorensen

Introduction

Planning, implementation, and evaluation are recurring functions of program management. A program is planned as a reasonable solution to a problem or need -- as a way to overcome a difficulty or achieve certain goals. The planned program is tried out or implemented to see whether the problem is solved or the goals are realized.

Evaluation is the process of assembling evidence about what was done and about the consequences of what was done so that sensible judgments and decisions can be made about what to do next. The judgments based upon the evidence may lead to a decision to try again but in a somewhat different way. Thus, unless the initial problem or need that started the whole process evaporates in the meantime, the sequence of planning, implementation, and evaluation begins gain but with more and better information on which to base the new planning.

This section is about the evaluation of occupational programs. The purposes of the section are limited to the following main points:

1. To show how evaluation is related to program planning and program implementation.

2. To identify some desirable qualities to seek in any program evaluation.

3. To clarify some reasons for evaluation and to illustrate how various reasons lead to different approahces.

4. To describe various recognized and accepted models or approaches to program evaluation.

5. To list some references or other sources that provide more detail than is appropriate for this handbook.

Uses of Evaluation

In the broadest sense, the purpose of evaluation is to help someone make a decision or choose among alternatives. In the context of occupational program planning, the central decisions are about ways to improve the total program and individual elements of it.

Sequentially, the evaluation question of first priority is to decide whether or not specified program purposes are important enough to justify

some expenditure of resources. Note that this first question is asked of the purposes to be served by a program, not of a program as it currently operates. This allows one to assess the importance of purposes independent of any existing or proposed means for achieving such purposes.

Figure 1 illustrates a sequence of questions that an occupational program manager might ask with respect to a specific course or other element in the oversall program. For illustration, let that element be denoted as "X."

As Figure 1 suggests, the first question that systematic evaluation can help answer is whether or not certain program purposes are worth pursuing. The approach to such a question is not unlike that followed in program planning and somehow distinct from evaluation. With equal justification, one may see needs assessment as a first step in evaluation. Functionally, such distinctions are not worth an argument. Essentially the same tools and techniques of formulating questions, gathering and analyzing data, and reporting findings apply to the process. The important point illustrated in Figure 1 is that the termination decision is based on an assessment of the importance of purposes of "some" program.

If it is established that the purposes justify some effort, then it is appropriate to assess the appropriateness of alternative means to those ends. In Figure 1, a means (program X) already exists, so the next question seeks to determine the adequacy of X. If the purposes are worthwhile ("yes" to question 1) and the present means to those purposes are satisfactory ("yes" to question 2), then continuation of X without change is justified.

Figure 1 has been intentionally simplified to illustrate only yes-or-no answers to broad questions. In practice, answers are not likely to be categorical -- agreement or disagreement will be expressed in degrees or shades of difference. It's a rare program in which some modifications will not be considered desirable, either in the specification of purposes and objectives or in the way that the program operates. Thus, the cycle of planning modifications, trying them out, and evaluating them is initiated. In the end, the main application of evaluation is in the continuing search for more effective and more economical ways to achieve worthwhile purposes.

Evaluation in Relation to Planning and Program Implementation

Figure 2 illustrates two paths from plan to program to program outcomes. The broken-line path illustrates intentions and goals while the solid-line path illustrates the observable world. For simplicity, the antecedents of "the plan" are not shown -- the problem to be solved, the needs assessment that identified discrepeancies between the existing and an acceptable state of affairs, and so on. Figure 2 helps illustrate several relationships and possible discrepancies that either may be foci of evaluation or factors to be considered in an evaluation.

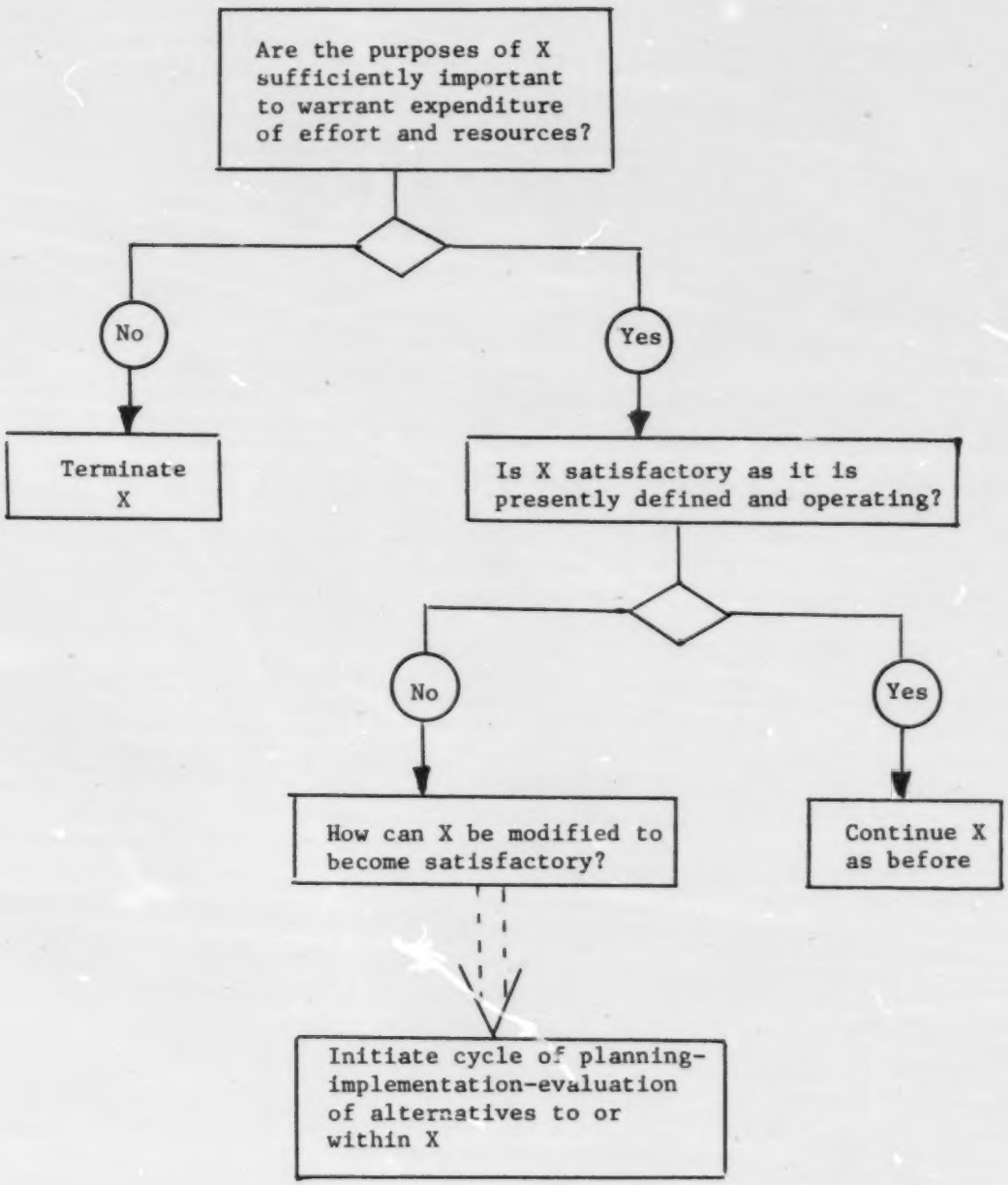
Are the purposes of X sufficiently important to warrant expenditure of effort and resources?
No
Yes
Terminate X
Is X satisfactory as it is presently defined and operating?
No
Yes
How can X be modified to become satisfactory?
Continue X as before
Initiate cycle of planning-implementation-evaluation of alternatives to or within X

Figure 1

SIMPLIFIED SEQUENCE OF QUESTIONS AND DECISIONS ABOUT PROGRAM TERMINATION AND MODIFICATION

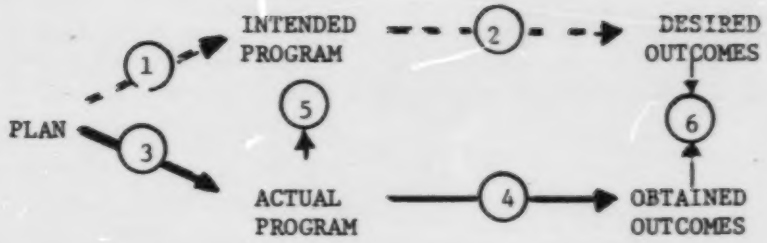

Figure 2

BASIC SEQUENCE FROM PLANNING TO
IMPLEMENTATION TO OUTCOME
(Numbers Defined in Accompanying Text)

Path segment 1 refers to the logical consistency or congruence between a stated plan and descriptions of an intended program. A comprehensive plan for a program will include at least the following characteristics:

1. Specific statements of applicable policies, purposes, and objectives.

2. Approaches (methods, strategies) to achieve the stated purposes and objectives, described in sufficient detail to guide action.

3. Provisions for contingencies, such as an alternative method of staffing if certain key personnel are not available.

4. Consideration of environmental factors and other situational variables that may affect implementation, such as estimates of the job market.

5. A realistic timetable of activities and events.

6. Specification of individual and organiational responsibilities for implementation (e.g., who is to be responsible and held accountable for what actions).

7. Acknowledgment of the relationships between purposes and resource allocations or, more simply, a "program budget."

A plan for a program may be evaluated logically against such criteria as the above. It also may be evaluated empirically on many, if not all, of its elements. For example, assumptions should be questioned and verified when possible, such as assumptions that certain resources will become available on schedule or that estimates of the marketplace are based on accurate and up-to-date indicators.

Path segment 2 in Figure 2 refers to the plausibility or likelihood of achieving desired outcomes given adequate implementation of an intended program. The objectives of a program -- shown in the figure as "desired outcomes" -- should be realistic, reasonable, and consistent with known facts. In a formal sense, the desired outcomes are hypotheses about what will occur under specified circumstances -- "If X occurs under conditions A, B, and C, then Y will result."

An "if-then" proposition such as the above accomplishes the following things:

1. The intended program -- X -- is described.

2. The environmental and situational variables thought to affect the operation of the intended program -- A, B, C, and so on -- are defined.

3. The desired outcomes or objectives -- Y -- are specified.

Specifications such as the above set the stage for systematic evaluation by indicating the kinds of questions that should guide an evaluation. Was the program implemented as intended? Did external variables exert expected influences? To what degree were desired outcomes realized?

Consideration of path segments 3 and 4 in Figure 2 will help clarify the relationship between the propositions about the planned program and what actually occurs. Path segment 3 refers to the relationship between the program plan and the program that actually is implemented. The empirical test of the adequacy of the program plan for implementation lies in the discrepancies between the intended program and that which is implemented (see 5 in the figure). In what ways did the actual program depart from what was planned or intended? Was a discrepancy between the intended and implemented program the result of something that might have been controlled -- that is, anticipated and provided for through an alternative in the plan, such as a contingency plan for staffing? Or was a discrepancy the result of something that was beyond direct control, such as an unexpected turn in economic conditions that affected revenue? In any case, what lessons for planning can be drawn from the fact that the actual program differed from what was intended?

The importance of identifying and analyzing discrepancies between intended and actual programs highlights a common shortcoming in many program evaluations. All too often, the program that is to be evaluated is defined by little more than its label or name rather than by the process, activities, and conditions that give it operational meaning. It follows inevitably that discrepancies between intended and actual program implementation cannot be detected, described, and assessed for their importance unless (1) the intended program is described and (2) the actual program is observed and described in similar terms.

Evaluation research over the past few years suggests strongly that certain differences between plans and intentions are unusually critical

for their effect on desired outcomes. One such difference is the distinction between "planned time on a task" and "engaged time on a task." For example, an instructional program may call for 30 minutes of drill or practice on a specified skill during each instructional day. A formal schedule and lesson plans may exist to help assure that this occurs. Observation of classroom activities frequently shows, however, that the actual amount of time devoted to the activity is less than planned. The reason may be as simple as the time of day that the activity is scheduled, such as preceding or following a break or recess which involves some "get ready" or "settle down" activities that consume time but are irrelevant to the instruction. Furthermore, pupils vary in their attending behavior or "engagement in the task" within a single classroom. Such variations, both within a classroom and across classrooms, cannot be detected and recorded unless they are observed systematically. If one seeks to understand the relationship between instructional processes and their outcomes, then the instructional processes must be measured as accurately as the outcomes.

Path segment 4 in Figure 2 illustrates the latter point. Whether or not the actual program corresponds to the intended one, it is only the actual program and the obtained outcomes that can be observed, measured, and analyzed to provide a basis for understanding why "X leads (or does not lead) to Y under conditions A, B, and C." The relationships implied by path segment 4 are the heart of evaluation reserach -- the search for explanation in terms of cause and effect.

Finally, the differences between desired outcomes and obtained outcomes (see 6 in Figure 2) identify the crucial contrast for estimating the effects of a planned program. Estimating effects, however, may require considerably more than a simple comparison. Suppose that desired outcomes or objectives were defined in terms of changing an existing state of affairs into a more desirable one, such as might be derived from a needs assessment. For example, imagine that a vocational program manager receives reports from employers that many graduates of a vocational preparation program are not able to do certain things that an employer reasonably can expect a new hire to be prepared to do following completion of the vocational program. These reports disturb the program manager who seeks evidence to support or refute the contention.

Some hasty fact-gathering confirms that the employers probably are correct, so the program manager and instructional staff plan a modification of the instructional program to rectify the oversight. A test of the skill is developed and administered to a sample of students currently in the program to estimate existing skill levels. A criterion of proficiency at the end of training is defined by instructional staff with the help of the advisory committee and a panel of employers. Instructors are asked to implement the plan to modify instructional, and trainees are given the performance test following completion of the program. What are the possible outcomes and what conclusions might be drawn from the results?

For simplicity, possible outcomes may be reduced to four extremens as shown in Table 1.

Table 1

INFERENCES FROM RESULTS OF PROGRAM MODIFICATION AND MEASURES OF SKILL ACHIEVEMENT

Implementation of Program Modification	Observed Consequence on Skill Measure: Criterion Level Achieved	Observed Consequence on Skill Measure: Criterion Level Not Achieved
Modification implemented as planned.	Program appears to be effective.	Program does not appear to be effective.
Modification not implemented as planned.	Program probably is not a critical cause of skill achievement.	Program effectiveness cannot be assessed because the plan was not implemented.

Note that only one of the four conclusions in Table 1 can be stated with confidence; that conclusion is the one which asserts that the program modification has not been tested due to failure to implement it as planned. The remaining three conclusions are tentative at best, given the conditions of the evaluation.

To assert conclusions with greater confidence or greater generality, future evaluations should consider such issues as the following:

1. Are there other program modifications that are more effective or less costly or both?

2. How much of the improvement can be attributed to influences other than the program modification? For example, were the trainees "unusual" or not typical in some key respect?

3. How valid is the measure of skill achievement? For example, how well does performance on the test predict performance on the job? For that matter, how critical is the skill itself to overall performance on the job? After all, the program was modified on the strength of employers' opinions, not a rigorous analysis of job requirements.

Several additional questions could be listed, but the above are sufficient to make the following points:

1. Measures of program implementation are essential if one seeks meaningful conclusions about cause-and-effect relationships between participation in a program and accomplishments following participation in that program.

2. Several reasonable alternative programs -- at least more than one -- must be examined before any conclusions can be drawn about relative effectiveness or relative costs or both.

3. Conclusions about effects are very sensitive to qualities of the measures of effects. When the index of training program effectiveness is performance in a next higher level of training or on the job, the quality of measurement validity is particularly crucial. Furthermore, when effectiveness is assessed against a standard or criterion of competence that is based on judgment without substantiating empirical evidence, inferences about effectivess are bound directly to the quality of the judgments that defined the criterion level.

4. The desired outcome of participation in a program rarely is singular. Usually one is interested in more than knowlege or skill, although these may be the central objectives. A program may be judged against several criteria, and it is not unusual to find that judgments about the worth of a program will vary with the criterion invoked. Cost, of course, is an obvious criterion to include with a measure of effectiveness. So, too, are measures of opinion and preference, including the attitudes of instructional staff. Most of these criteria call for measures other than tests.

5. Evaluation designs and methods of analysis are available that will permit more worthwhile conclusions to be drawn. For example, alternate method comparison designs with either experimental or statistical control of trainee assignment to method will increase the generality of conclusions. As another example, replication (i.e., repeating the trial with successive groups of trainees) will add strength to conclusions. As a further example, multivariate correlational analyses that take account of trainee charateristics, instructor characteristics, specific processes in the instructional method, cost factors, and so on, will extend the range of possible conclusions.

Desirable Qualities in Any Evaluation

The foregoing discussion of the relationship of evaluation to program planning and program implementation has helped illustrate several considerations that should be made in planning and carrying out an evaluation. In the following paragraphs, these and other considerations are stated or restated as reminders about qualities to seek in any evaluation.

- Evaluation involves the application of human judgment to evidence. Because this is so, individual preferences and predispositions will influence ways in which evaluation questions are stated, selection of evidence, choices among methods of data collection and analyses, and so on. A "good" evaluation will be explicit in stating assumptions and expressing the rationale for choices among approaches or kinds of data. A good evaluation also will be designed to protect against erroneous or unwarranted inferences by remembering that a hypothesis can be tested only under conditions where it can be either rejected or accepted.

Evaluations have no value if they are not available to those who must make decisions when the time for those decisions comes due. Evaluation reports must be timely. This often means that approximations must stand for more precise estimates that might be possible with more time or additional resources. Put another way, good evaluations are designed with the timing needs of decision-makers in mind. If this means that compromises in methods are made to satisfy a decision timetable, then a good evaluation will be explicit in describing the delimitations and restrictions that apply to inferences that can be drawn from the analyses.

Evaluations should recognize and acknowlege multiple causality of events in general and human behavior in particular. Short-term consequences may exert a ripple effect on later consequences. One program may influence other programs in unintended ways. Events and conditions external to a program -- social and political developments, activity in the marketplace -- will influence the program environment, often in unexpected ways. A "good" evaluation scarcely can be other than multivariate in forms, particularly when it is realized that experimental controls are virtually impossible to establish and maintain. It is just such inability to control conditions in a "natural experiment" and the inevitability of multiple causality that makes it essential that the programs under study be observed and measured periodically and frequently. One may not be able to control the treatment, but one can describe it in process terms.

Evaluation data should be based on measures obtained under conditions that reflect attention to criteria of measurement quality. Many of these criteria are too complex to discuss in this brief section, but mention of them can at least serve to alert one to the issues. Key criteria include the following:

-- Objectivity, or the ability to share data and test for common interpretation by different observers.

-- Reliability, or the qualities of consistency and stability in measures.

-- Validity, which may refer to several attributes. In evaluation of instructional programs, the following two are most important: (1) the content validity of the measure (e.g., does a test used reflect a fair sample of the content of instruction) and (2) the predictive validity of the measure (e.g., the relationship between the measure, such as a performance test of skill following training, and a subsequent measure of performance in the setting where the skill is applied, such as error rates on the job).

-- Practicality, or the feasibility of applying the measure or obtaining the data in the intended way.

Evaluations must reflect high standards of professionalism: (1) the integrity of the evaluation staff, (2) protection against systematic bias in the formulation of questions, collection of data, and analysis and interpretation of findings, (3) strict adherence to confidentiality of sensitive or personal information.

Contrasting Orientations Toward Evaluation

The manner in which program evaluations are approached and carried out will be affected by a host of factors, some of which are determined by external circumstances and others of which simply reflect the capabilities and styles of those undertaking the evaluation. Following is a brief discussion of some of the issues that an evaluator should consider since each will have a bearing on the manner in which the work is undertaken. The issues are expressed below as though they were choices between one orientation or a competing one; in practice, the choices may not be as extreme as may be implied.

Formative or Summative Evaluation

Formative evaluation concentrates primarily on the development or alteration of a program, course, or unit while it is still fluid. Empirical research methods may be applied to such activities as (1) successive tryout and refinement of materials, (2) developing descriptions of target groups (e.g., capabilities, attitudes, interests) to aid in planning and materials development, (3) definition of goals and objectives to assure clarity, reasonableness (i.e., capable of being attained), and appropriate specificity, and (4) implementation procedures and variations in methods. The formative evaluator should be part of the program development team from the outset. As such, the formative evaluator usually shares (or comes to share) the developer's enthusiasm for developing something that works well. The formative evaluator's special contribution comes primarily from ability to apply empirical research techniques in continuous, fast-feedback, assessment of alternatives before the program (course, unit) is frozen and put into general use.

Summative evaluation is directed toward assessing the overall program after it is in operation. Summative evaluation has essentially the same meaning as "impact assessment," and will pay attention to both intended and unintended outcomes of the program. If nothing else, summative evaluation is concerned with consequences of programs, but this does not mean that summative evaluation cannot also involve analyses of processes.

One implication of extraordinary importance follows from the distinction between formative and summative evaluation. It is very difficult for the same person or team to serve both the functions of formative and summative evaluation. The formative evaluator has been an active participant in the development effort. The summative evaluator should

be independent of the program development so that the summative evaluation can be objective and accepted by others as such. This is important because the audiences for summative evaluations usually are those who set policy and determine resource allocations. These distinctions suggest that summative evaluation should be conducted by a third party who has no stake in the decisions that follow the evaluation.

Comparisons or Absolute Standards

Comparative evaluations concern relative differences, such as differences between similar groups or differences over time for a single group. Absolutist evaluations refer to assessing results against standards related to program objectives. Comparing a group's performance against norms on a standardized test of achievement illustrates one common comparative evaluation. By contrast, minimum competency testing (in which a minimum acceptable level of performance is defined in advance) illustrates a kind of absolutist evaluation. In the testing field, the distinction between norm-referenced tests and criterion-referenced tests is analogous to comparative vs. absolutist evaluation.

Internal or External Evaluation

Internal evaluation refers to that conducted by persons from the program staff. As noted under discussion of formative and summative evaluation, formative evaluation by its nature is internal even though someone "from the outside" is retained to work with the developers and provide formative evaluation services.

External evaluation refers to that conducted by someone independent from the program staff. Credible summative evaluation usually is external evaluation.

Evaluation and Evaluative Research

The distinction between evaluation and evaluative research (or perhaps more appropriately, between evaluation and scietific inquiry) involves issues too complex to develop in this handbook. Roughly, however, such pairs of terms or phrases as the following will connote, if not satisfactorily clarify, kinds of distinctions intended: question vs. hypothesis, descriptive vs. explanatory, impact vs. causal, empirical generalization vs. theory, assertion vs. proof, applied vs. basic.

The above terms imply differences in purpose and approach that exaggerate some of the distinctions intended. As noted at several points earlier in this section, evaluation is inquiry applied to making choices or decisions. For example, an evaluation may seek to reduce uncertainty for a manger who must make practical decisions about policies and the allocation of resources. Evaluative research -- and to an even greater extent, scientific inquiry -- is less concerned with imminent decisions or choices and more concerned with constructing a network of propositions and theories that "explain" generalizable phenomena.

In a crude sense, evaluation must try to answer such questions as "does it work" or "how well does it work" or "how much does it cost to operate." Evaluative research tries to answer a few more questions, such as "why does it work that way" or "for whom does it work best under certain conditions" or "does it have to cost that much."

Evaluation is one procedure for formulating and testing hypotheses, but not necessarily hypotheses of the same form and generalizability as derived in formal acientific inquiry. Evaluation of educational programs uses most of the methodological and analytic tools of the social and behavioral sciences, and should use them with no less rigor and tough-mindedness. Evaluation results can contribute to scientific theory-building, but that is not an essential quality of evaluation.

Experiments, Quasi-Experiments, and Natural Variation

These comments might have been headed, "consensus and controversy in the design of evaluations." On two fundamental points, there is general agreement regarding evaluation design -- that is, the conditions and schedule under which data are collected or measures are taken:

1. The design should be such that findings are interpretable.

2. The design should be such that findings are generalizable.

Interpretability refers primarily to the ability to make appropriate "attributions of cause." Were the results due to the program, or could the results be due to other factors that the design did not control for or that the analyses could not offset? Examples of problems of attribution of cause were mentioned earlier in the discussion of evaluation in relation to program planning and implementation.

Generalizability refers to the ability to extrapolate findings from a particular evaluation to other situations. (This quality sometimes is referred to as the external validity of the design.) Problems of generalizability are entangled with issues of sampling in the broadest sense -- the representativeness of the setting or situation, and the replicability of the program.

Points at issue regarding appropriate and acceptable designs are not trivial. While authorities tend to agree without controversy regarding the inappropriateness of some designs (e.g., the so-called "ex post facto experiment"), strong positions have been declared regarding true "experiments" and the place of correlational studies in program evaluation. Campbell and Stanley (1963) are committed to the true experiment, express qualified support for other designs, and suggest rigorous strictures regarding conditions that make correlational studies appropriate.

By contrast, Cooley and Lohnes (1976) have made a persuasive case for multivariate correlational studies: "The multivariate correlational studies proposed...may not support the direct, causal inferences that some educators desire, but neither do they make impossible demands for

rigorously experimental data bases ... Educational innovations have to be evaluated in natural settings ... Replication should be the rule. The reliability of important contrasts between worthy, competitive instructional models should be demonstrated by replication of them, over and over again if possible. The role of statistical procedures in establishing evaluation contrasts is heuristic more than inferential."

The underlying preference reflected in comments throughout this section of the handbook is toward the Cooley and Lohnes position.

General Models of Evaluation

After giving due credit to others who have undertaken a similar exercise, Ernest House of the University of Illinois, has developed a taxonomy of major evaluation models (House, 1978). Reproduction of House's taxonomy in this handbook is a convenient way of illustrating the range of legitimate approaches to program evaluation in education. Since the taxonomy is organized to display differences according to such dimensions as major audiences, preferred outcomes, and typical questions, the taxonomy also may serve as a preliminary catalog of options from which one might choose when considering alternative evaluation approaches. It should go without saying that the taxonomy can be expanded to admit new models. And for someone who treats the taxonomy as a catalog of options, it should be evident that eclectic combinations are not prohibited.

House's taxonomy which follows is as it appeared in the Educational Researcher, Vol. 7, No. 3, March 1978. Even though the table format is highly telegraphic in its descriptions of the major models, effort to expand upon that abbreviated description in this handbook would be scarecely less concise. For readers who seek more information, the bibliography at the pages 43 and 44.

Dr. Philip H. Sorensen is a senior psychologist in educational research at SRI International, 333 Rovenswood Avenue, Menlo Park, Calif. 94025.

FIGURE 1: A TAXONOMY OF MAJOR EVALUATION MODELS

Model	Proponents	Major Audiences	Assumes Consensus on	Methodology	Outcome	Typical Questions
Systems Analysis	Rivlin	Economists, managers	Goals; known cause & effect; quantified variables.	PPBS; linear programming; planned variation; cost benefit analysis.	Efficiency	Are the expected effects achieved? Can the effects be achieved more economically? What are the most *efficient* programs?
Behavioral Objectives	Tyler, Popham	Managers, psychologists	Prespecified objectives; quantified outcome variables	Behavioral Objectives; achievement tests	Productivity; accountability	Are the students achieving the objectives? Is the teacher producing?
Decision Making	Stufflebeam, Alkin	Decision-makers, esp. administrators	General goals; criteria	Surveys, questionnaires, interviews; natural variation	Effectiveness; quality control.	Is the program effective? What parts are effective?
Goal Free	Scriven	Consumers	Consequences; criteria	Bias control; logical analysis; modus operandi	Consumer choice; social utility.	What are *all* the effects?
Art Criticism	Eisner, Kelly	Connoisseurs, Consumers	Critics, standards,	Critical review	Improved Standards	Would a critic approve this program?
Accreditation	North Central Association	Teachers, public	Criteria, panel, procedures	Review by panel; self study	Professional acceptance	How would professionals rate this program?
Adversary	Owens, Levine, Wolf	Jury	Procedures and judges	Quasi-legal procedures	Resolution	What are the arguments for and against the program?
Transaction	Stake, Smith, MacDonald, Parlett-Hamilton	Client, Practitioners	Negotiations; activities	Case studies, interviews, observations	Understanding; diversity	What does the program look like to different people?

PROGRAM EVALUATION

C. Allen Paul, Dean, Technical-Vocational
Education, Grossmont College

Director's Note: The following is a brief outline of the material presented to the San Diego guidelines workshop on March 3, 1978 by Dean Paul on the subject of occupational program evaluation.

The reasons for occupational program evaluation can be summarized by utilizing the questions to be answered when seeking to write a comprehensive news story: Why? What? How? When? Who?

The why of occupational program evaluation can be summarized by reviewing the following: accreditation, fiscal audits, VEA requirement of program's strengths and weakness, cost analysis, and data for grants.

The what areas incorporate the various aspects of the program to be evaluated and, among others, include: curriculum, relevancy, methodology, instructors, facilities, resources, enrollment, placement, client satisfaction, employer satisfaction and timing.

The how factors in evaluation incorporate a wide variety of techniques. Familiar to most occupational educators in California are the more formal systems (COPES, DROVE, TRACE, and SAM), but various types of community, district and institutional surveys have been effectively utilized at Grossmont. Student follow up by the college utilizing a mail system (copy appended) has been used for many years. In addition cost analysis of such items as enrollments and attrition also are used. Various methods of instructor evaluation (by students, self or by peers) have been effective.

The question as to when to evaluation is a constant one. Most educators would opt for evaluations on a continuum -- have evaluations as a method of locating potential problems rather than evaluating after trouble as surfaced. Evaluation is done when you can afford it (you often can't afford not to evaluate). Evaluation is a tool for improvement and thus should be built into every program as a routine process of action.

Who are to be evaluated? Again the question may have a wide variety of answers. According to the program priorities, certain elements will get closer scrutiny than others, but the following are listed possible areas for evaluation: (students, employers, instructors, administrators, supportive services, counseling, placement, etc.) By the same token, these just-listed elements may also serve to do the evaluation of their own participation in the program or some aspects of the program itself.

Dear Grossmont College Attendee or Graduate:

The Grossmont Community College Program is vitally dependent on feedback from you and others who have had educational experiences here. Your response by simply filling in this brief questionnaire when added to all the others constitutes vital information pertinent to course and program development and change. We need to know from you how valid our findings and assumptions have been in establishing the present curriculum.

In the absence of any other means to secure this kind of feedback, I am taking this measure, and ask you to please respond. Your attention and thoughtful cooperation to this matter will be greatly appreciated, and serves those who will follow.

Sincerely,

C. Allen Paul

C. Allen Paul, Dean
Technical-Vocational Education

(1) SOCIAL SECURITY NO. ☐☐☐ ☐☐ ☐☐☐☐

(2) YES ☐ NO ☐ ARE YOU PRESENTLY ENROLLED AT A COLLEGE OR UNIVERSITY? IF YES, CHECK ( ) COLLEGE(S) BELOW.

___ 3752490	Grossmont College	___ 3756764	San Diego Evening College	___ 3780582	California Western University
___ 3767209	San Diego State University	___ 3756939	San Diego Mesa College	___ 3781473	Point Loma College
___ 3778270	University of Calif., San Diego	___ 3753001	San Diego Miramar College	___ 3780582	United States Internat'l University
___ 3758632	San Diego City College	___ 3758075	Southwestern College	___ 3788486	University of San Diego
				___ 2222222	Other

MAJOR _____ UNITS COMPLETED SINCE GROSSMONT _____

(3) WHAT IS YOUR PRESENT EMPLOYMENT STATUS? ( ) CHECK ONE

_____ 1. Employed in occupation trained/educated; Namely _____
_____ 2. Employed in related occupation; Job Title _____
_____ 3. Employed out of field; Area _____
_____ 4. Employed in an apprenticeship program; Namely _____
_____ 5. Employed and not satisfied; Reason _____

(4) WHAT SINGLE STATEMENT BEST DESCRIBES YOUR PRESENT JOB? ( ) CHECK ONE

_____ 1. Employed part-time, less than 30 hours.
_____ 2. Employed full-time, 30 hours or more.
_____ 3. Unemployed. Seeking Employment.
_____ 4. Unemployed. Not seeking work; why _____
_____ 5. Employed in Military.

(5) YES ☐ NO ☐ WOULD YOU LIKE GROSSMONT COLLEGE'S PLACEMENT OFFICE TO HELP YOU IN SECURING EMPLOYMENT?

(6) DO YOU ( ) CHECK ONE

_____ 1. Live with your parents?
_____ 2. Rent?
_____ 3. Own your home?

(7) Yes ☐ No ☐ Received Certificate from Grossmont; When _____

(8) Yes ☐ No ☐ Received A.S. Degree from Grossmont; When _____

(9) Yes ☐ No ☐ Received A.A. Degree from Grossmont; When _____

(10) Yes ☐ No ☐ In Armed Forces while attending Grossmont.

(11) Yes ☐ No ☐ Presently receiving public assistance or plan to apply.

(12) Yes ☐ No ☐ Did Grossmont College curriculum meet your needs?

(13) Yes ☐ No ☐ Did you acquire a marketable skill at Grossmont?

(14) Area of study in Vocational Education _____

(15) Area of study other than Vocational _____

(16) _____ NUMBER OF DEPENDENTS

(17) PRESENT EMPLOYER _____

COMMENTS

SACRAMENTO CITY COLLEGE

OCCUPATIONAL ADVISORY COMMITTEES

Formation. Each occupational education program shall have an advisory committee. Programs offered at more than one Los Rios College may operate with a joint advisory committee.

Membership. Advisory committee members will be appointed by the college president under authority of the Board of Trustees after consultation with the occupational administrator and program faculty. Membership will normally be for a term of 1-3 years. Members will be selected based upon consideration of: (1) the authority of the individual to represent an occupational group, (2) the active and current involvement of the individual in the occupational field, (3) interest, enthusiasm and time commitment, (4) representation of community and student population. Department faculty attend and participate in advisory committees as program resource persons.

Meetings. Occupational advisory committees will normally meet each semester. Special meetings may be called according to need. The occupational area deans will be responsible for development of an annual schedule of advisory committee meetings and for the review of meeting agendas and minutes prior to distribution. Meeting notices, agendas, and support materials will be mailed two weeks in advance of the meeting with minutes being mailed within two weeks after the meeting. Meetings will be chaired by the instructional subject area chair or designee. Minutes will be taken by a subject area chair designee.

Role and function. Occupational advisory committees advise school administrators and instructional staff on matters impacting educational preparation for employment. Committee functions include:

1. Providing information on specific skills needed for successful employment within the occupational field.
2. Alerting the college to available educational field experiences and personnel qualified as teachers, substitutes, guest lecturers, speakers, and resident experts.
3. Providing recommendations on the instructional program.
4. Assisting in improving public relations and communication between the college and the community.
5. Assisting in recruiting students and in providing internships, work experiences and graduate placements.
6. Providing review and recommendation of curriculum changes for consideration by the campus curriculum committee.
7. Reviewing legislation and administrative issues impacting the educational program and/or the occupational field.

Parliamentary procedures. Advisory committees are designed to operate on a general consensus basis. In rare cases formal votes may be recorded. Only bonafide committee members may initiate motions and vote. All actions carry the status of recommendations for administrative and district governing board consideration.

Evaluation. Occupational area deans will evaluate advisory committee meetings on the basis of appropriateness of agenda, general conduct and participation of the meeting and principal outcomes. The goal of evaluation is improved instructional program performance.

Associate Dean, Occupational Education
12/8/77
JG

OCCUPATIONAL PROGRAM GUIDELINES

2140 West Olympic Boulevard, Suite 531, Los Angeles, California 90006 (213) 380-6000 Ext. 261

Occupational Advisory Committees
February 1978

Types:

1. Community Advisory Committees--generalists
2. Occupational or trade-tech. Advisory Committees--specialists

Purpose:

To insure the appropriateness of existing and
Proposed vocational programs or courses.

Duties and responsibilities:

To advise and assist in the development of new programs.
To review existing programs and courses.
To review content of existing programs and courses.
To supply technical information.
To suggest modifications:
    Changes in course content
    Deletion of courses or programs
    Updating of equipment and/or tools.
Standards of performance (level of skills to be developed)
Selection criteria of students.
Employment trends immediate and future.
    How many trainees can be absorbed.
Placement of students in full time and part time positions.
Assisting in instructor recruitment.
Development of apprenticeship training (if appropriate).
Entry level wages and salaries--maximum obtainable.
Determining value of program for employees presently employed in the occupation.
Evaluation of texts, manuals, brochures and other instructional material.
Types of equipment, tools and supplies needed.
Assist with acquiring donated equipment and supplies.
Information relative to the adequacy of existing facilitiesor.
Suggestions for modification of existing facilities.
Assisting in the development of new facilities.

Limitations of Advisory Committees:

Limited to advising, assisting and suggesting.
    Program operation is the sole responsibility of the educational institution.

Composition of Advisory Committees:

Representatives of employers, employees, unions and public agencies and students.
The Committee should include individuals who can supply technical and personnel information.

Frequency of Meetings:

This will vary with the task confronting the Advisory Committee.
New program development may require meetings as frequent as once a month until the program becomes operational.
Program monitoring may be on a yearly basis.
Modification and updating may vary with the awareness of the need for change by the instructional staff.
For ongoing programs it would appear that Advisory Committees should meet at least once a year.

Meetings & Reports:

An agenda should be developed and given to committee members in advance of meeting.
Accurate minutes should be taken and disseminated as soon as possible to all members of the committee.
A file of the minutes and other pertinant data should be established and maintained.

Recommendations:

When action is indicated this should be transmitted to the appropriate administrator post-haste.
In general, administrative personnel and faculty should be kept abreast of all developments.

Informing the public:

When applicable, students and the community served by the institution should be made aware of what is going on.

Recognition:

It is imperative that non-institutional members services should be acknowledged at appropriate times.

References:

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